

CERTAMEN MELASTOMATACEIS XXXII.

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PACHYLOMA NANUM Wurdack, sp. nov.

P. pusillo Wurdack affinis, foliorum laminis anguste ovatis 3(-5)-nervatis differt.

Suffrutex 10-18 cm altus; caulium nodi inconspicue decidue-que setulosi (0.3-0.5 mm) et internodi glabri. Petioli 0.1-0.2 cm longi; lamina 1.5-2(-2.5) X 0.7-0.9 cm anguste ovata apice acuta basi rotundato-obtusa, coriacea et integra vel apicem versus sparse subtiliterque serrulata marginibus incrassatis, glabra, 3(-5)-nervata. Flores terminales solitarii vel terni; pedicelli 3-4 mm longi ad medium bibracteolati, bracteolis ca 1.8 X 0.4-0.5 mm lanceatis. Hypanthium (ad torum) 6 mm longum glabrum; calycis tubus ca 0.1 mm longus, lobis interioribus 0.2-0.4 mm longis obscuris sparse glanduloso-ciliolatis (0.1 mm) dentibus exterioribus inconspicuis non eminentibus. Petala 8.5-10 X 7.5-8 mm elliptica apice late acuta et setula unica 0.2-0.25 mm longa terminata alioqui glabra. Stamina vix dimorphica; filamenta 6.5-7 mm longa glabra; antherarum thecae 5.8-6 X 0.5 mm subulatae, poro 0.2 mm diam. ventraliter inclinato; connectivum 1-1.7 mm prolongatum ad basim dorsaliter cauda 2 mm longa armatum, appendice ventrali acute 1.2 mm bilobulata et ad basim 0.2 mm callosa. Stigma punctiforme; stylus 12 X 0.25 mm glaber; ovarii apex glaber.

Type Collection: G. Davidse, O. Huber, & S. S. Tillett 17422 (holotype MO 2769063; isotypes US, VEN), collected in white sand savanna at Cucurital de Yagua, Caño Yagua, 66° 34' W, 3° 36' N, Depto. Atabapo, Terr. Amazonas, Venezuela, elev. ca 120 m, 8 May 1979. "Corolla reddish purple; filaments white below, reddish purple above; anthers reddish brown."

Paratype: O. Huber 2565 (US, VEN), topotypical, fruiting.

Pachyloma pusillum has oblong 1-nerved leaf blades mostly (at least on mature shoots) 0.7 cm or less wide and proportionately much narrower; three recent collections from Canaripó (lower Río Ventuari east of the junction with Río Orinoco) are Steiermark & Redmond 112841 and Huber 1071 and 1899. *Pachyloma nanum* also resembles a miniature version of *P. huberioides* (Naud.) Triana (which lacks incrassate leaf margins) or *P. coriaceum* DC. (with thicker oval leaf blades). Several other undescribed (fruiting only) taxa of *Pachyloma* have been collected in northern Brazil and southern Venezuela.

MERIANIA AMISCHOPHYLLA Wurdack, sp. nov.

M. weberbaueri Macbride affinis, foliis essentialiter sessilibus subtus sparse stellulato-puberulis differt.

Ramuli obtuse sulcato-tetragoni sicut foliorum venae

primariae subtus inflorescentiae axes principalesque modice vel sparse setosi pilorum apice laevi 0.7-1.5(-2) mm longo basi expansa aspera et modice pilis stellulato-pinoideis 0.1-0.3 mm longis induti. Folia essentialiter sessilia (petiolo crasso 0.1-0.3 cm longo); lamina (9-)12-26 X (3-)5-9 cm elliptica apice gradatim acuminato basi rotundata, subrigida et obscure distanterque calloso-serrulata, supra glabra, subtus in superficie sparse pilis stellulato-pinoideis ca 0.1 mm longis et 0.2 mm latis puberula, breviter (0.5-2 cm) 5-plinervata nervis secundariis ca 3-4 mm inter se distantibus nervulis subtus planis obscuris areolis ca 0.4 mm latis. Inflorescentia 8-15 cm longa submultiflora; flores 5-meri ad ramorum apices subumbellate dispositi; pedicelli 0.7-1 cm longi sicut hypanthia dense incurvo-setosi pilorum apicibus protractis laevibus tenuibus ca 1-2 mm longis basibus expansis 0.2-0.3 mm diam. dense asperis. Hypanthium (ad torum) 6 mm longum obscure costulatum; calycis tubus 3.5-4 mm longus, lobis interioribus 6.5 mm longis ovato-oblongis rotundatis ciliolatis demum deciduis, dentibus exterioribus crassis ca 1-1.5 mm eminentibus; torus intus sparsiuscule setulosus. Petala 19-24(-32) X (15-)17-21(-23) mm asymmetricice obovata apice rotundato et paulo emarginato apicem versus obscure caduceque glanduloso-ciliolata (0.1 mm) alioqui glabra. Stamina dimorpha glabra; filamenta 12.5 mm vel 12 mm longa; antherarum thecae subulatae 9.5 X 1.3 mm vel 10 X 2 mm, poro 0.3-0.4 mm diam. dorsaliter inclinato; connectivum non prolongatum dorsaliter ad filamentum insertionem paullulo (0.4 mm vel 0.2 mm) elevatum, appendice dorsali 2.8-3 X 3 mm rotundata 0.2 mm apiculata vel 4 X 1 mm obtusa. Stigma 0.7 mm diam.; stylus 1.4 X 1-0.5 mm glaber in ovarii cono ca 0.4 mm immersus; ovarium 5-loculare glabrum apice obtuse 5-lobulato.

Type Collection: José Schunke 9842 (holotype US 2902542; isotype MO), collected in high forest in the cumbre of Divisora, Dto. Padre Abad, Prov. Coronel Portillo, Depto. Loreto, Peru, elev. 1500-1600 m, 6 Feb. 1978. "Arbusto de 3-4 m. Flores strong reddish purple; antheras amarillas; sepalos rugosos, de color pardo amarillente. Hojas rugosas."

Paratype: J. Schunke 11374 (MISSA, US), topotypical.

Meriania weberbaueri has leaves with petioles 3-7 cm long and blades beneath more densely pubescent, the surface hairs mostly with protracted smooth tips (and stellulate bases); in stamen morphology, the two species are alike. No other species in Sect. Umbellatae has sessile leaves and most of them have anther connectives prolonged below the thecae to the filament insertion.

MICONIA LIESNERI Wurdack, sp. nov.

M. metallica (Naud.) Triana affinis, foliis subsessilibus ad basim cordatis floribus 4-meris differt.

Ramuli teretes sicut folia glabri. Folia in quoque pari paullulo inaequalia; petioli 0.3-0.5 cm longi crassi; lamina 17-28 X 9-15 cm elliptica apice subabrupte 1-1.5 cm hebeti-acuminato basi 0.7-1 cm cordata, tenuiter coriacea et integra, 5-nervata

vel breviter pseudo-plinervata nervis secundariis 5-8 mm inter se distantibus nervulis subtus creberrime elevato-reticulatis areolis ca 0.2 mm latis. Panicula 4-11 cm longa submultiflora, ramis primariis in quoque nodo 2 vel 4, glandulis minutis (0.05 mm) sparsis exceptis glabra; flores semper 4-meri sessiles, bracteolis ca 1 X 0.3-0.4 mm oblongis subpersistentibus. Hypanthium (ad torum) ca 2.7 mm longum glabrum; calyx 0.8 mm altus truncatus, dentibus exterioribus 0.2-0.3 mm longis apiculatis patentibus; torus intus densiuscule glandulis 0.1 mm longis obsitus. Petala glabra 6.2-6.3 X 1.9-2 mm oblonga apice rotundato vel paulo emarginato. Stamina isomorphica glabra; filamenta 3-3.1 mm longa; thecae 2.6-2.7 X 0.45 X 0.45 mm oblongo-subulatae poro 0.1-0.15 mm diam. dorsaliter inclinato; connectivum non prolongatum ad basim dorsaliter dente hebeti 0.4 mm longo armatum ventraliter exappendiculatum. Stigma ca 0.3 mm diam.; stylus 6 X 0.3-0.2 mm glaber; ovarium 4-loculare et ca 3/4 inferum, cono 0.3 mm alto modice glanduloso.

Type Collection: J. A. Steyermark, R. Liesner, & A. González 119642 (holotype US 2910804; isotypes MO, VEN), collected on sandstone slopes of Cerro de Cuite, along Quebrada La Colorada 4 km south of Campamento La Colorada south of Santo Domingo, 7° 30' N, 72° 5' W, Estado Táchira, Venezuela, elev. 450 m, 8 November 1979. "Shrub 1 m tall; leaves subchartaceous, deep green and transversely veined above, silvery green below; apex of petiole dull lavender. Inflorescence pendent; petals pale buff-white; calyx pale green; rachis and pedicels coral red."

Paratype: J. Cuatrecasas 13092 (US), from "hoya del río Cubugón, El Indio, región del Sarare, Cordillera Oriental," Depto. Norte de Santander, Colombia, elev. 420-480 m, 13 Nov. 1941. "Frutex. Hojas coriáceas. Pétalos blancos."

The suggested relative has leaf blades narrowed (sometimes obscurely auriculate) to the base and with laxer (0.5-1 mm) venule areoles, 5-merous flowers, anther connectives dorsally not appendaged, and 3-celled ovaries, but similar calyx, petals, and toral glands. Miconia liesneri does not seem to be closely related to M. asclepiadea Triana nor M. cruenta Triana; M. anisophylla Triana (of which I have seen only the type collection) has similar leaf venulation, but smaller 5-merous flowers with exappendiculate stamens and leaves quite unequal in each pair. The inflorescences in M. liesneri are terminal but soon overtopped by lateral branchlet growth.

MICONIA HEXAPETALA Wurdack, sp. nov.

M. roseae Gleason affinis, floribus 6-meris stigmatibus expanso ovario omnino infero differt.

Ramuli teretes sicut petioli laminarum venae primariae subtus inflorescentiae axis ramique modice vel sparse pilis crassis asperis 0.4-0.7(-1) mm longis et dense pilis stellulato-pinoideis 0.1-0.2 mm longis setulosi. Petioli (1)-2-3(-3.5) cm longi; lamina (10)-14-22 X (4)-6-12 cm elliptica apice paullo subabrupteque per 1-1.5 cm hebeti-acuminato basi obtusa, subrigida et obscure undulato-serrulata, supra glabra, subtus in venis

secundariis sparse stellulato-pinoideo-puberula in venulis superficiei glabra, 5-nervata (pari debili inframarginali incluso) nervis secundariis 3-4 mm inter se distantibus nervulis subulis planis areolis ca 0.5-0.8 mm latis. Panicula 8-10 cm longa pauciflora; flores plerumque 6-meri, pedicellis 6-13 mm longis et ca 0.5-1 mm infra hypanthium articulatis, bracteolis (delapsis ?) non visis. Hypanthium (ad torum) 3-4 mm longum extus dense pilis crassis 0.2-0.3 X 0.2 mm asperis indutum intus supra ovarium sparse glandulosum; calyx 6-7 mm altus intus dense sericeo-strigosus in alabastro clausus demum in lobos 4-5 usque ad 2 mm supra torum irregulariter dehiscens; torus intus sparse vel modice glanduloso-puberulus. Petala 13-15 X 5-7 mm obovato-oblonga pruinosa. Stamina in dimensionibus paulo dimorphica; filamenta 9-9.5 mm vel 7.5-8.5 mm longa modice glanduloso-puberula (0.1 mm); antherarum thecae 6-6.4 vel 5-5.6 X 0.9 X 0.7 mm oblongo-subulatae, poro 0.1-0.15 mm diam.; connectivum non prolongatum exappendiculatum dorsaliter ad basim sparse glandulis minutis ornatum. Stigma expansum 2.3-2.6 mm diam.; stylus 11-12.5 X 1-1.7 mm modice glanduloso-puberulus in ovarii apicem paulo immersus; ovarium 6-loculare et omnino inferum (cono non evoluto) apice glabro.

Type Collection: José Schunke 11432 (holotype US 2894038; isotype MISSA; isotypes to be distributed, AMAZ, DUKE, F, FSU, IBE, K, MO, NY, RB, RSA, TEX, VDB, USM), collected in high forest on trail to caserío San Agustín, La Divisoria, Dto. Hermilio Valdizán, Leoncio Prado, Depto. Huánuco, Peru, elev. 1600-1500 m, 28 April 1980. "Shrub 2-3 m; flowers purplish white; anthers deep purplish pink; sepals greenish yellow. Fruit 13 mm long, 14 mm diam."

Paratype: E. E. Smith & Jorge Vera 375 (US), from "between Divisoria and Carmen Alto, Tingo Maria," (Huánuco ?) Peru, elev. ca 1450 m, 18 March 1954. "White recurved petals and pink stamens."

The suggested Bolivian relative (isotype US) has 5-merous flowers, barely expanded stigma ca 1 mm diam., and a developed ovary cone. Another possible relative is M. muricata (Don) Triana (isotype US), which is similar in vegetative pubescence and foliar venulation, but with 5-merous fruit and a developed ovary cone. Miconia rosea may well be synonymous with M. muricata, but all Peruvian collections (the most recent being Schunke 9131, Río Chino, Padre Abad, Coronel Portillo, Loreto, 1000-1100 m) are fruiting only. My earlier (Phytologia 23: 474. 1972) acceptance of Macbride's tentative synonymization of M. glandulifera Cogn. under M. muricata seems wrong; the latter species has laxer foliar venulation and flowers which seem too small (and without long hypanthial hairs) to develop into the large fruit found in M. muricata. Of the 15 examinable flowers and buds in M. hexapetala, 3 showed 5 petals and the remainder 6 petals.

MICONIA GENTRYI Wurdack, sp. nov.

M. ingenti Wurdack affinis, foliorum laminis subtus

petiolis hypanthiisque setosis ovarii apice setuloso et dense resinoso-granuloso differt.

Ramuli primum obscure quadrangulati mox teretes sicut petioli inflorescentia hypanthiaque dense setosi pilis ca 1.5-2.5 mm longis basim versus paulo asperis et modice pilis amorpho-pinoideis ca 0.1-0.3 mm longis puberuli. Petioli 2-4 cm longi; lamina (12-)15-20 X (7-)9-15 cm late elliptica apice abrupte vel subabrupte per 0.5-1 cm acuminato basi obtusa vel rotundato-truncata, chartacea et obscure distanterque undulato-serrulata, supra sparsiuscule setosa pilis 2-3 mm longis gracilibus laevibus, subtus in venis primariis secundariisque modice pilis subamorpho-pinoideis 0.1-0.2 mm longis puberula et sicut venis tertiariis sparse resinoso-granulosa et modice setosa pilis ca 1-1.5 mm longis gracilibus laevibus, 5(-7)-nervata nervis secundariis ca 5 mm inter se distantibus nervulis subtus planis modice reticulatis (areolis ca 0.5 mm latis). Panicula 4-5 cm longa multiflora; flores 5-meri congesti, pedicellis crassis ca 1-2 mm longis, bracteolis 3-4 X 1.5-2 mm oblongis deciduis plerumque ad hypanthii basim insertis. Hypanthium (ad torum) 4 mm longum intus dense resinoso-granulosum; calyx 2.5-3 mm longus truncatus intus glaber. Petala 13-13.5 X 15-16 mm late obovata paulo cucullata intus glabra extus dense indumento appresso subamorpho-pinoideo induta. Stamina essentialiter isomorphica; filamenta 10 mm longa modice glanduloso-puberula (0.1-0.15 mm); thecae 6.5-7 X 1 X 1.5 mm subulatae poro 0.2-0.3 mm diam. ventraliter inclinato, connectivo non prolongato dorsaliter ad basim ca 0.2-0.3 mm eminenti juxta thecas basaliter glandulis sessilibus dense obsito. Stigma capitellatum 1.6-1.7 mm diam.; stylus paulo immaturus ca 6.5 X 1-0.8 mm basim versus strigosus; ovarium 3-loculare et ca 3/4 inferum, cono ca 0.7 mm alto paulo setuloso (0.1-0.2 mm) et dense resinoso-granuloso.

Type Collection: A. Gentry, E. Forero, M. Dillon, E. Renteria, L. Skog, M. Sousa, & D. Lellinger 28624 (holotype US 2863846; isotypes COL, MO), collected in cloud forest on Alto de Nique (southernmost peak of Cerro Pirre massif) exactly on Panama/Colombia border, elev. 1300-1500 m, 19 April 1980. "Tree 15 m; Flowers pink."

The suggested relative has similar upper leaf surface hairs, stamens and stigma, but only an amorpho-granulose indument on the branchlets, petioles, veins and venules on the leaf blades beneath, and hypanthia, as well as glabrous ovary apices.

MICONIA MOOREI Wurdack, sp. nov.

M. anisotrichae (Schlecht.) Triana affinis, foliis minoribus 5-plinervatis inflorescentiis divaricatis floribus minoribus differt.

Ramuli primum obscure tetragoni mox teretes sicut petioli laminarum subtus venae primariae inflorescentia hypanthiaque primum modice pinoideo-puberuli pilis 0.1-0.2(-0.3) mm longis et sparse vel sparsiuscule setulosi pilis laevibus 0.3-0.5(-1) mm longis. Petioli 0.5-1(-2) cm longi; lamina (3-)4-7 X 1.5-2.3 cm lanceata vel oblongo-lanceata apice anguste acuto basi obtusa vel

rotundato-truncata, chartacea et minute ciliolato-serrulata, supra subaspera et sparse strigulosa pilis laevibus ca 0.3(-0.5) mm longis, subtus in venis secundariis tertiariisque sparse vel sparsissime setulosa in superficie glabra, breviter (0.3-0.5 cm) 5-plinervata nervis secundariis 2-3 mm inter se distantibus. Inflorescentia submultiflora primum terminalis mox pseudo-lateralis 2-3 cm longa diffusa e basi ramosa; flores 5-meri, pedicellis 1(-2) mm longis, bracteolis ca 0.5-1 mm longis linearibus. Hypanthium (ad torum) 1.7 mm longum; calycis tubus 0.3 mm longus, lobis interioribus 0.5 mm longis ovato-rotundatis in sinus extus setulis glanduliferis 1-2 armatis, dentibus exterioribus lobos interiores aequantibus setula terminatis. Petala ut videtur rubro-tincta glabra 2.6-2.8 X 1.4-1.8 mm oblongo-elliptica apice rotundato-acuto. Stamina glabra in dimensionibus paullulo dimorphica; filamenta 1.7-2 mm longa; antherarum thecae 0.9-1.2 X 0.45 X 0.45 mm oblongae poro terminali 0.1 mm diam.; connectivum ad basim 0.2-0.25 mm prolongatum non expansum. Stigma non expansum; stylus 5.8 X 0.25-0.15 mm basim versus sparse glanduloso-puberulus (0.1 mm); ovarium 3-loculare 1/2 inferum apice sparse glanduloso-setuloso (0.15 mm).

Type Collection: H. E. Moore Jr. 2003 (holotype BH; isotype US), collected near Molango on road to Lolotla, Hidalgo, Mexico, elev. ca 1100 m, 9 Nov. 1946. "Flowers pinkish."

Paratype: C. A. Purpus 6105 (US), from Sierra Madre between Misantla and Naolinco, Vera Cruz, Mexico, August 1912.

Miconia anisotricha has ovate (length/width ratio 1.5-2, rather than 2.5-3.3) 5-7-nerved leaf blades, erect inflorescences very tardily overtopped by vegetative growth, hypanthia 3-4 mm long, broader petals and longer anthers; the same differences apply to M. erythrantha Naud. All three taxa are qualitatively alike in trichome forms, subacute petals, oblong anthers with slight basal connective prolongation, sparsely glandular-puberulous style and ovary apex, unexpanded stigma, and 3-celled 1/2 inferior ovaries. As previously discussed (Phytologia 14: 270. 1967), the correct generic disposition for this species-group is undetermined. The paratype of M. moorei was distributed as Clidemia aff. petiolaris (S. & C.) Schlecht. ex Triana, as well as an unpublished Standley name. Hal Moore, a good friend in the past, should have long since been commemorated in the melastomes.

MICONIA AMNICOLA Wurdack, sp. nov.

Sect. Miconia. M. elaeagnoidi Cogn. affinis, foliis basaliter nervatis bracteolis floribusque maioribus differt.

Ramuli primum quadrangulati mox teretes sicut petioli foliorum laminae subtus inflorescentia hypanthiaque pilis appressis stellulato-lepidotis omnino obtecti. Petioli (0.5-)1-1.5(-2.5) cm longi; lamina 7-14(-20) X 2.5-4(-6) cm anguste oblongo-elliptica apice gradatim acuminato basi acuta, firme chartacea et integra, supra glabra, 3-nervata (pari debili ca 0.5-1 mm inframarginali neglecto) nervis secundariis ca 4 mm inter se distantibus nervulis subtus planis laxe (ca 1-2 mm) reticulatis.

Panícula 7-11 cm longa oblonga multiflora, ramis primariis 1-2 cm longis, ramulis ultimis ad anthesim ca 1 cm longis secundifloris; flores 5-meri sessiles, bracteolis 3-4 X 0.5-0.7 mm demum deciduis. Hypanthium (ad torum) ca 2.8 mm longum; calycis tubus 0.5 mm longus, lobis 0.3-0.5 mm altis deltoideis in fructu persistentibus, dentibus exterioribus obscuris. Petala glabra 3 X 1.5-1.6 mm oblongo-obovata paullulo emarginata. Stamina dimorphica glabra; filamenta 4.7-4.8 mm vel 4 mm longa; thecae oblongae, poro ca 0.25 mm diam. ventraliter inclinato. Stamina maiora: thecae 2.5-2.6 X 0.4 X 0.45 mm; connectivum 0.5-0.6 mm prolongatum, appendice basali 0.6-0.7 X 0.8 mm cordiformi. Stamina minora: thecae 2-2.3 X 0.4 X 0.4 mm; connectivum 0.3-0.4 mm prolongatum ad basim 0.15-0.2 mm trilobulatum. Stigma expansum 0.6-0.7 mm diam.; stylus 7.5 X 0.2-0.4 mm glaber; ovarium 3-loculare et 2/3 inferum, cono 0.4 mm alto glabro.

Type Collection: José M. Schunke 158 (holotype US 1459065), collected at Gamitanacocha, Río Mazan, Depto. Loreto, Peru, elev. 100-125 m, February 1, 1935. "Bush 3 m. Flowers white."

Paratypes (all Depto. Loreto, Peru; US): Río Marañón near mouth of Río Tigre, elev. 115 m, Killip & Smith 27530 ("Tree 15-20 feet"); Iquitos, elev. 100 m, Killip & Smith 27032 ("Tree 10-15 feet"), Llewelyn Williams 3660; mouth of Río Momon at Río Nanay, Sidney McDaniel 13631 ("Shrub; mature fruit purplish"); Río Momon, Revilla 2501 ("Arbol ribereño 8 m; frutos rojos marrones"); Río Tacsha Curaray, Croat 20418 ("Tree 5 m; fruits green to orange"); Río Nanay above Bellavista, Rimachi 3461 ("3 m; fruit blue"); Pampa Chica to Mapa Cocha, Río Nanay, McDaniel & Rimachi 22262 ("6 m; corolla and filaments white; immature fruits orange").

The suggested relative has distinctly (albeit shortly) plinnerved leaves, bracteoles ca 1 mm long, hypanthium plus calyx ca 1.7-1.9 mm long, distant minute (0.1 mm) calyx lobes, petals 2.3-2.5 X 1.2-1.3 mm, and anther thecae 1.4-1.5 mm or 1.2-1.3 mm long. Miconia punctata (Desr.) Don ex DC. has more sharply 4-angled branchlets, (usually) relatively broader leaves, bracteoles only 0.5-1 mm long, shorter hypanthia and anthers, and stellulate-puberulous ovary apices. Schunke 158 was distributed as (and cited in the Flora of Peru) M. serialis DC. (with formless pubescence on the lower leaf surfaces) and the Killip & Smith and Williams material had been identified as M. chrysophylla (Rich.) Urban (with 3-4-whorled leaves, smaller flowers, and rimose anthers).

MICONIA ZARUCCHII Wurdack, sp. nov.

M. wittii Ule affinis, bracteolis maioribus persistentibus antherarum connectivis non prolongatis differt.

Ramuli primum sulcato-tetragoni mox teretes sicut folia subtus inflorescentia hypanthiaque pilis stellulato-lepidotis 0.1-0.15 mm latis omnino obtecti. Petioli 0.8-1.5 cm longi; lamina (7-)10-15(-19) X (1-)2-3(-3.5) cm anguste oblongo-elliptica apice gradatim acuminato basi late acuta, tenuiter coriacea et integra, supra glabra, trinervata nervis secundariis 3-5 mm inter se

distantibus nervulis subtus obscuris ob indumentum occultis. Panicula 6-9 cm longa submultiflora; flores 5-meri sessiles ad ramorum apices congesti; bracteolae ca 3 X 2 mm persistentes. Hypanthium (ad torum) 2.5 mm longum paulo costulatum; calycis tubus 0.8 mm longus, lobis interioribus 0.1-0.2 mm longis remotis, dentibus exterioribus obscuris. Petala 2.8 X 1.5-1.7 mm obovata paulo emarginata glabra. Stamina paulo dimorphica glabra; filamenta 4 mm longa; antherarum thecae 2.7-3 X 0.2-0.25 mm anguste oblongae, poro 0.1 mm diam. ventraliter inclinato; connectivum non prolongatum ad basim appendice cordiformi 0.4 X 0.45 mm vel dentibus ventralibus 0.2 mm longis armatum. Stigma 0.4-0.45 mm diam. clavate expansum; stylus 6 X 0.2 mm glaber in ovarii apicem 0.2 mm immersus; ovarium 3-loculare et 1/2 inferum, cono ca 0.7 mm alto apice sparse lepidoto-puberulo.

Type Collection: J. L. Zarucchi 1632 (holotype US 2816631), collected along stream across from Mitú, Vaupés, Colombia, 22 May 1976. "Treelet 4 m tall; flowers white; fruit grey."

Paratypes (both Colombia): Schultes & Cabrera 12555 (US), from Soratama, Río Apaporis between Río Pacoa and Río Kananari, Amazonas-Vaupés, elev. ca 250 m; Zarucchi 2439 (US), topotypical ("Shrub 2 m tall; fruit pale red-orange").

Miconia wittii has caducous linear floral bracteoles only 0.2-0.4 mm wide, somewhat longer calyx lobes (0.4-0.6 mm), anther connectives prolonged 0.6-0.9 mm, and ovary moderately lepidote-puberulent at the apex. Vegetatively, M. zarucchii resembles the narrow-leaved element of M. wittii (Mem. N. Y. Bot. Gard. 10, 5: 172. 1964) and Schultes & Cabrera 12555 (fruiting) was cited as that species. A vegetative semblance also exists with M. amnicola (vide supra).

MICONIA SUBULIPETALA Wurdack, sp. nov.

M. acutipetalae Sprague affinis, foliorum laminis 3-nervatis eciliatis esetulosis venularum areolis amplioribus differt.

Ramuli teretes primum sicut petioli sparse vel modice setulosi pilis laevibus 0.5-1(-2) mm longis et modice stellulato-pinoideo-furfuracei demum glabrati. Petioli (0.3-)0.5(-0.8) cm longi; lamina (3-)4-9 X (2-)2.5-3.5 cm elliptica vel oblongo-elliptica apice per 1-1.5(-2) cm subgradatim hebeti-acuminato basi rotundato-obtusa, chartacea et integra eciliata, supra glabra, subtus secus venas primarias sparse decidueque pilis stellulato-pinoideis 0.1-0.2 mm longis armata alioqui glabra, 3-nervata nervis secundariis ca 3 mm inter se distantibus nervulis subtus planis laxe reticulatis (areolis 1.5-2 mm latis). Inflorescentia 2-5 cm longa pauciflora ramis 2-4 in quoque nodo sparsiuscule stellulato-pinoideo-puberulis et sparse vel sparsissime setulosis; flores 5-meri, pedicellis 1-1.5(-4) mm longis, bracteolis 0.2-0.3 mm longis linearibus caducis. Hypanthium (ad torum) 1.2-1.4 mm longum basaliter sparse decidueque stellulato-furfuraceum apicem versus glabrum; calyx 0.4 mm altus truncatus, dentibus exterioribus setuliformibus ca 0.25 mm eminentibus. Petala vix granulosa 3.8-3.9 X 0.8 mm oblonga apice acuto et 0.1-0.15 mm apiculato. Stamina dimorphica glabra; filamenta 2.5 mm

vel 2 mm longa. Stamina maiora: thecae 1.2 X 0.15 X 0.15 mm oblongae poro 0.1 mm diam. ventraliter inclinatio; connectivum 1 mm prolongatum dorsaliter ad basim dente triangulari 0.6-0.7 X 0.4 mm armatum ventraliter exappendiculatum. Stamina minora: thecae 1 X 0.2 mm oblongae poro 0.1 mm diam. dorsaliter inclinatio; connectivum 0.8 mm prolongatum ad basim 3-lobulatum lobulis ventralibus duobus 0.15 mm longis lobulo dorsali 0.15-0.2 mm longo. Stigma non vel vix expansum 0.2 mm diam.; stylus 4.8 X 0.15 mm glaber; ovarium 2-loculare et 2/3 inferum, cono 0.4 mm alto glabro.

Type Collection: Manuel Rimachi 3421 (holotype US 2910986; isotype MISSA), collected in upland forest on trail from caserio de Grau 2nd zone, Río Momón, Dto. Iquitos, Prov. Maynas, Depto. Loreto, Peru, 7 March 1978. "8 m. Corolla white."

Miconia acutipetala, still known to me only from the original collection, has 5-nerved or 5-pseudoplinerved ciliolate leaf blades sparsely setulose on both surfaces and with venule areoles beneath only 0.7-1 mm wide. No qualitative floral differences between the two species are evident. Both taxa are related to M. tetrasperma Gleason. Of the four ovaries dissected in M. subulipetala, two had only one ovule in each locule and two had one ovule and two ovules in the two locules.

ALLONEURON ECUADORENSE Wurdack, sp. nov.

A. hexameri Wurdack et A. sneidernii Wurdack affinis, foliis subtus dense setulosis differt.

Ramuli sulcato-tetragoni sicut petioli inflorescentiaque dense setulosi pilis 0.7-1.5 mm longis ad basim expansis et obscure papillatis. Petioli 5-5.5 cm longi; lamina 18-20 X 12-13.5 cm ovato-elliptica apice per 1.5-2 cm late acuminato basi obtusa, subrigida et obscure serrulata, supra paulo rugulosa et sparsiuscule setulosa pilis usque ad 1 mm longis ad basim robustis, subtus dense setulosa pilis gracilibus ca 1 mm longis, 7-nervata vel obscure (0.5 cm) plinervata nervis secundariis 3-5 mm inter se distantibus. Panicula ca 18 cm longa multiflora; flores haplostemonae 7-9-meri, pedicellis 3-5 mm longis sicut hypanthiis pilis usque ad 1.5 mm longis incurvis modice setosis. Hypanthium (ad torum) 5 mm longum; calyx in alabastris ca 8 mm altus clausus demum irregulariter in lobis plus minusve deciduis fissus post anthesim ca 1.5 mm supra torum dehiscens. Petala glabra 8.5-10 X 4.5 mm obovato-rhomboidae acuta unguiculata. Stamina isomorphica glabra; filamenta 3.8 mm longa; antherarum thecae 1.6 X 0.5 X 0.3 mm poro singulo 0.2 mm diam. dorsaliter inclinatio, appendice dorsali 0.3 mm longa hebeti-acuta. Stigma non expansum; stylus 9 X 0.4-0.2 mm glaber; ovarium (3-)⁴-loculare omnino inferum apice glabro alis 7-9 cum hypanthio conjuncto.

Type Collection: A. Gentry & G. Shupp 26552 (holotype US 2856667; isotype MO), collected in Río Blanco drainage above Chical ca 12 km west of Maldonado, Prov. Carchi, Ecuador, elev. 1300-1500 m, 25 Sept. 1979. "Tree 15 m. Flowers lavender."

Both Colombian relatives have pubescence on the leaves beneath sparse and confined to the principal veins. In flowers,

A. sneidernii has closer affinities, but with the dorsal stamen spur much longer (1-1.7 mm). Alloneuron was previously known only from Colombia and Peru; it is distinguishable from other Ecuadorian genera by the haplostemony and capsular fruit developing from a completely inferior ovary.

TOCOCA RACEMIFERA Wurdack, sp. nov.

T. caquetanae Sprague affinis, inflorescentia racemiformi differt.

Ramuli sicut laminarum venae primariae subtus petioli formicariaeque densiuscule setosi pilis 2-4 mm longis eglandulosis pilis glanduliferis ca 1-1.5 mm longis sparse intermixtis et modice vel sparse stellato-puberuli (pilis 0.2-0.25 mm latis sessilibus). Folia tenuia ciliata ubique sparse setosa (pilis 1-2.5 mm longis) venularum areolis subtus laxis in quoque pari plerumque disparilia (uno sine formicario), rare aequalia et ambo cum formicariis. Folia maiora: petioli liberi ca 1 cm longi; formicaria ca 1.5 cm longa ad petiolorum apices evoluta et in laminarum bases paullulo immersa; lamina 17-28(-40) X 7.5-14(-16) cm elliptica apice subabrupte per 1.5-2 cm acuminato basi late acuta vel obtusa, distanter crenulato-serrulata, breviter 5-pseudoplinervata nervis secundariis ca 5-7 mm inter se distantibus. Folia minora: petioli 0.3-0.5 cm longi; lamina 4-7 X 2-5 cm late ovato-elliptica apice breviter (0.3-0.5 cm) acuminato basi cordulata obscure undulato-serrulata 3(-5)-nervata nervis secundariis ca 2-3 mm inter se distantibus. Inflorescentia primum terminalis demum lateralis racemiformis 9-24 cm longa densiuscule setosa pilis ca 2 mm longis plerumque eglanduliferis et sicut hypanthia dense stellato-puberula. Flores 5-meri, pedicellis ad anthesim ca 0.5 mm longis, bracteolis ca 1 mm longis lanceatis setuliferis persistentibus. Hypanthium (ad torum) 2.6-2.7 mm longum densiuscule glanduloso-setulosum (pilis 0.8-1 mm longis) in fructu sicco obtuse 10-costatum; calycis tubus 0.1 mm longus, lobis interioribus ca 0.3-0.5 mm longis ciliolatis, dentibus exterioribus setulosis ca 0.7-1 mm eminentibus. Petala glabra 3-3.1 X 0.8-0.9 mm obovato-oblonga apice rotundato vel paulo retuso. Filamenta 3-3.1 mm longa glabra; antherarum thecae 2.8-3 X 0.3-0.35 mm oblongo-subulatae, poro 0.1 mm diam. dorsaliter inclinato; connectivum non prolongatum dorsaliter supra basin vix elevatum. Stigma paulo expansum 0.5 mm diam.; stylus 8 X 0.2-0.3 mm glaber in ovarii apicem paullulo (0.1-0.2 mm) immersus; ovarium 4-loculare et 2/3 inferum, apice 0.5 mm alto glabro.

Type Collection: W. S. Alverson, Starker White, & John D. Shepherd 66 (holotype US 2850614; isotype WIS), collected in wet forest 3 km from Planta Providencia 28 km southwest of Zaragoza, Río Anorí valley, Depto. Antioquia, Colombia, elev. 400-700 m, 21 Feb. 1977. "Shrub 3 m. Inflorescence hairs red."

Paratypes (all Colombia): Alverson, White, & Shepherd 282A (US, WIS), topotypical ("Shrub 2 m. Inflorescence hairs pink. Ants are Pheidole sp."); J. Denslow 2145 (WIS) and 2314 (US, WIS), both topotypical; Linda Albert de Escobar & Gloria Carmona

s. n. (US), from Puerto Valdivia, Antioquia, elev. 500 m ("Arbusto de 2.5-3 m estatura. Formicaria habitada de hormigas amarillas, Pheidole"); N. C. Fassett 25410 (US), from Cerro la Isla, Landazuri region 70 km north of Velez, Depto. Santander, elev. ca 900 m, 29 June 1944 ("Young fruit orange").

Tococa caquetana has non-emergent external calyx teeth, broader petals, a more pronounced dorsal hump on the stamen connectives, and (along with its relatives T. parviflora Triana and T. tetramera Wurdack) branched inflorescences. No mature buds of T. racemifera were available so the calyx dehiscence is unknown; however there is no close affinity with the other racemiflorous species. For several years, I had filed the collections of T. racemifera under Clidemia; the floral features indicate that the present generic disposition is better.

CLIDEMIA CUATRECASASII Wurdack, sp. nov.

C. densiflorae (Standl.) Gleason affinis, ramis dense setosis foliis distincte crenulato-serrulatis longe 5-pseudo-plinervatis bracteolis calycis dentibus exterioribus petalisque longioribus differt.

Ramuli primum obscure quadrangulati mox teretes sicut petioli primum dense deflexo-setosi (pilis 2-3 mm longis obscure sparseque asperis) et dense pilis clavulatis 0.1-0.3 mm longis asperis induti. Folia in quoque pari in dimensionibus plerumque disparilia (1.5-4: 1); petioli ca 0.5 cm longi; lamina 18-27 X 7-14 cm vel 7-14 X 2.5-6 cm elliptica vel obovato-elliptica apice subgradatim per 1-3 cm hebeti-acuminato basi rotundato-obtusa, chartacea et crenulato-serrulata, supra primum aspero-setulosa mox glabrata, subtus secus venas primarias praecipue basim versus sparse vel modice setosa pilis 1-2(-3) mm longis et sicut venis secundariis modice vel dense pilis subpinoideis 0.1-0.3(-0.5) mm longis setulosa in superficie glabra, breviter (0.5-2 cm) 5-plinervata pari interiore ca 1-2 cm ad costam paralleli nervis secundariis ca 5-9 mm inter se distantibus nervulis subtus planis areolis ca 0.5-0.8 mm latis. Flores 4-meri in foliorum superiorum axillis glomerati, pedicellis supra bracteolas 0.5-1 mm longis, bracteolis 6-7 X 0.4-0.6 mm subulatis setulosis persistentibus. Hypanthium (ad torum) 2.5 mm longum extus pilis stellulato-pinoideis 0.1-0.2 mm longis dense indutum et circum torum modice setulosum pilis ca 1 mm longis; calycis tubus 0.1-0.3 mm longus, lobis interioribus 1-1.2 mm longis ovato-oblongis obtusis intus resinoso-granulosis, dentibus exterioribus setulosis ca 1 mm eminentibus; torus intus dense glanduloso-setulosus (0.1-0.15 mm). Petala glabra 3-3.5 X 0.6-0.8 mm oblonga apice rotundato. Stamina isomorphica; filamenta ca 1.6 mm longa glabra; antherarum thecae 1.3 X 0.4 X 0.4 mm oblongae poro 0.2-0.25 mm diam. dorsaliter inclinato; connectivum paulo (0.1-0.15 mm) prolongatum, dorsaliter ad basim dente acuto descendenti glanduloso-ciliolato 0.4-0.6 mm longo armatum. Stigma vix expansum 0.2-0.25 mm diam.; stylus 6-6.5 X 0.15-0.2 mm glaber; ovarium 4-loculare et 3/4 inferum, cono 0.3-0.5 mm alto glandulis 0.1 mm longis modice coronato.

Type Collection: J. Cuatrecasas 13957 (holotype US 2815108; isotype NY), collected at Puerto Merizalde, Río Naya, Depto. del Valle, Colombia, elev. 5-20 m, 20 Feb. 1943. "Frútex alto; caliz verde interiormente, ext. pardusco; pétalos agudos blancos; baya anaranjada."

Paratypes (all Valle, Colombia): Killip 5119 (NY, US), from Cordoba, Dagua Valley, elev. 80-100 m; Killip & García 33283 (NY, US), from 18 km east of Buenaventura, elev. 50 m; Cuatrecasas 16623 (NY, US), from La Trojita, Río Calima, elev. 5-50 m; Cuatrecasas 21023 (NY), from El Tambo, Quebrada de Santa Ana, Buenaventura, elev. 20-30 m ("Frútex ramoso scandens. Hoja rigida, membranosa verde oscura, brillante haz, grisáceo clara envés. Caliz verde claro. Pétalos blancos").

The suggested relative has branchlets with only subclavate hairs 0.1-0.3 mm long, essentially entire 3-nerved leaves, bracteoles only 2.5-3 mm long, external calyx teeth projecting 0.1-0.2 mm, and petals 2.5-2.6 mm long, but similar interior calyx lobes, stamens, and pistil. The aspect of C. cuatrecasasii suggests that of C. chocoensis Wurdack, which has finer and shorter cauline hairs, smaller bracteoles, and 5-merous flowers with smaller petals. Most of the collections of C. cuatrecasasii had been originally distributed as Conostegia dentata Triana.

CLIDEMIA CURSORIS Wurdack subsp. *ANGUSTIFOLIA* Wurdack, subsp. nov.

A subspecie typica foliis angustioribus trinervatis differt.

Type Collection: R. Liesner, A. González, & R. F. Smith 9529 (holotype US 2910803; isotypes MO, VEN), collected in forest on Rio San Buena 10 km west of La Fundacion, 7° 47' -48' N, 71° 46' -47' W, Edo. Táchira, Venezuela, elev. 700-1000 m, 13-15 March 1980. "Shrub 0.4 m. Sepals green or red inside; petals white."

The typical subspecies has 5-nerved leaf blades mostly 2-3 cm wide and with length/width ratio 2.4-4, while the new subspecies has leaf blades about 1 cm wide and with length/width ratio 8-13. Despite the striking foliar difference, the two taxa are alike qualitatively in vegetative features and there are no inflorescence or floral differences. The typical subspecies has recently been collected in Táchira at Cerro Las Minas 18-20 km southeast of Santa Ana, elev. 1150-1380 m (Steyermark et al 119829 and 120036).

HENRIETTELLA PRANCEI Wurdack, *Phytologia* 24: 206. 1972.

A recent collection (Madison, Kennedy, Monteiro, & Braga 6667, Rio Curicuriari, Amazonas, Brazil) with abundant flowers showed a dominance of 5-merous (11 flowers 5-merous; 3 flowers 4-merous). Reexamination of the holotype (US) showed two visible 5-merous flowers; the original dissections were of three 4-merous flowers. The undescribed Venezuelan melastome mentioned under Loreya (Flora de Venezuela 8: 653. 1973) is H. prancei, now known in Territorio Amazonas from Caño Pimichin (Bunting, Akkermans, & Van Rooden 4072; Maguire, Wurdack, & Bunting 36375) and Caño Temi

near Yavita (Li. Williams 14073; Wurdack & Adderley 42882; Steyermark & Bunting 102948); all the Venezuelan collections are in fruit.

BLAKEA POLYANTHA Wurdack, sp. nov.

B. allotrichae Uribe affinis, foliorum petiolis sparsiuscule setis robustis indutis laminis subtus secus venas primarias esetosis bracteais latioribus floribus paulo maioribus differt.

Ramuli robusti teretes sicut petioli pilis compressis robustis usque ad 10 X 1 mm sparse induti; nodi processibus stipuliformibus hyalinis demum laceratis deciduis usque ad 4 X 2 cm armati. Petioli 16-18 cm longi sicut laminarum venae primariae subtus pedicelli hypanthiaque subtiliter pube subamorpho-arachnoidea arcte appressa induti; lamina 33-40 X 25-29 cm late elliptico-ovata apice per ca 2 cm abrupte caudato-acuminato basi rotundato-truncata vel paulo (usque ad 1 cm) cordata, chartacea et crenulate-serrulata, supra glabra, subtus in superficie (glandulis minutis sparsis exceptis) glabra, 9-pseudoplinervata (nervis ad basim usque ad 2 cm coalitis) nervis secundariis 3-4 mm inter se distantibus nervis tertiariis paulo evolutis. Flores ca 30 in quoque node; pedicelli 15-20 mm longi esetosi vel apicem versus setis paucis adscendentibus armati; bractae liberae exteriores 20-23 X 7 mm interiores 17-19 X 7 mm lanceatae acuminate extus dense incurvo-setosae (pilis 2-3 mm longis ad apicem fimbriatis) intus sparse (basim versus) vel dense (apicem versus) strigosae (pilis 1-2 mm longis). Hypanthium (ad torum) 4 mm longum extus sparsiuscule strigulosum ad basim processibus hyalinis usque ad 3-3.5 X 2-3 mm fimbriatis subtentum; calycis tubus ca 1 mm longus, lobis ca 1-1.2 mm longis remotis setulosis. Petala 15-16 X 9.5-10 mm obovato-oblonga apice late obtuso et mucronulato glanduloso-ciliolata alioqui glabra. Filamenta 5 mm longa; thecae 3.7 X 1.8 X 1.2 mm lateraliter cohaerentes minute biporosae; connectivum ad basim dorsaliter dente oblongo rotundato 0.3-0.4 mm longo descendenti armatum. Stigma elongato-capitatum ca 2 X 1.4 mm; stylus 1.4 X 0.9 mm modice glandulosus (0.1 mm) in ovarii collo ca 1.5-2 mm immersus; ovarium 6-loculare, collo setis paucis robustis glanduliferis 4-6 mm longis coronato.

Type Collection: M. T. Madison & L. Besse 7269 (holotype US 2862587, 2862588; isotype SEL), collected in wet montane forest near El Pailon, ca 45 km below Maldonado on a path to Tobar Donose, Prov. Carchi, Ecuador, elev. 800 m, 2 Dec. 1979. "Shrub to 4 m tall, sparingly branched. Leaves dull dark green above, paler below. Calyx brown; corolla white."

The suggested Colombian relative has petioles adaxially densely setose with robust hairs and abaxially (as the primary leaf veins beneath) densely setose with fine apically fimbriate hairs, bracts 2-3 mm wide, petals 12-13 mm long, and bluntly acute connective calcar 0.5-0.8 mm long; in other qualitative floral details, the two taxa are alike. In the treatment of *Blakea* for Ecuador, *B. polyantha* would be placed near *B. jativae* Wurdack or perhaps *B. eriocalyx* Wurdack, both of which are not

as closely related as B. allotricha.

TOPOBEA CAUDATA Wurdack, sp. nov.

T. alternifoliae Gleason, T. reductae Gleason, et T. dodsonorum Wurdack in floribus affinis, foliis in quoque pari essentialiter isomorphice differt.

Ramuli primum paulo compressi demum teretes sicut folia bracteae hypanthia calyxque primum modice subpinoideo-pulverulenti (indumento arcte appresso pilis ca 0.05-0.1 mm diam.) glabrata. Petioli 1-1.5 cm longi; lamina (5-)7-11 X (4-)5-6.5 cm elliptica apice abrupte 1-2 cm caudato-acuminato basi late acuta vel anguste obtusa, firme chartacea et integra, 5-nervata (pari inframarginali tenui excluso) pari interiore et costa subtus per 0.5-1 cm puculato-coalito nervis secundariis 0.7-1 mm inter se distantibus. Flores in quoque nodo superiore duo; pedicelli 8-12 mm longi; bracteae liberae subrigidae; bracteae exteriores 6-7 X 2.5-3 mm oblongo-lanceatae acutae hypanthium aequantes vel paulo breviores; bracteae interiores 4-5.5 X 3-3.6 mm oblongo-ellipticae apice obtuso vel late acuto. Hypanthium (ad torum) 5 mm longum paullulo costulatum; calycis tubus 1 mm longus, lobis 3-3.2 X 2 mm ad basim remotis oblongis hebeti-acutis. Petala glabra 8-8.5 X 4.5 mm oblongo-obovata apice late obtuso vel subtruncato. Filamenta 3.7 mm longa; antherae 2.5-2.6 X 1 mm lateraliter non cohaerentes, poro dorsaliter inclinato; connectivi appendice dorso-basali apiculato ca 0.3 mm eminente. Stigma vix expansum 0.4 mm diam.; stylus glaber 0.6-0.3 mm; ovarium 4.5 mm inferum; conus cylindricus 1.5 mm altus glaber, collo non vel vix (0.2 mm) evoluto.

Type Collection: M. T. Madison & L. Besse 6991 (holotype US 2862583; isotype SEL), collected in wet montane forest near El Pailon ca 45 km below Maldonado along path to Tobar Donoso, Prov. Carchi, Ecuador, elev. 800 m, 26 Nov. 1979. "Shrub 3 m tall; leaves shiny above and dull below. Flower waxy dark yellow-green."

All three suggested relatives have very anisomorphic leaf pairs, as well as shorter floral bracts (to 3 mm long). The vegetative aspect of T. caudata is like that of T. pittieri Cogn.; however, that wide-ranging species has smaller floral bracts, truncate calyx limb, and larger petals and anthers. In the Flora of Ecuador, T. caudata would key to near T. dodsonorum.

TOPOBEA MODICA Wurdack, sp. nov.

T. inflatae Triana affinis, ramulorum nodis non inflatis calycis dentibus exterioribus brevioribus ovarii collo non evoluto differt.

Ramuli primum obscure obtuseque tetragoni mox teretes, internodiis glabris, nodis primum appresso-setulosis (0.7 mm) mox glabratis; linea interpetiolaris evoluta ca 0.2 mm alta. Petioli 1.5-2 cm longi glabri; lamina (6-)7-10(-12) X 4-6.5 cm obovato-elliptica vel elliptica apice breviter (0.3-0.6 cm) abrupteque hebeti-acuminato basi acuta et adaxialiter paulo bitumida, supra primum ad basim ipsam obscure barbellata mox glabrata alioqui

glabra, subtus in venarum primariarum axillis dense setulosa (0.5-1 mm) alioqui glabra, 5-nervata pari exteriori ca 1.5-2 mm inframarginali nervis secundariis 0.7-1 mm inter se distantibus. Flores in quoque nodo superiore 6(-8), pedicellis ad anthesim 1.5-2 cm longis sicut bracteis hypanthiis calycibusque glabris; bractee exteriores 5 X 4.8 mm suborbiculari-oblongae obtusae apiculatae ad basim ca 2 mm coalitae quam hypanthio dimidio breviores; bractee interiores usque ad basim liberae 4.5 X 5 mm oblongo-suborbitales apice paulo emarginato et apiculato. Hypanthium 6 mm longum teres; calyx 3 mm longus essentialiter truncatus, dentibus exterioribus ca 0.5 mm longis et 0.2 mm eminentibus. Petala glabra 21-23 X 10-11 mm obovato-rhomboidae apice late hebeti-acuto vel anguste hebeti-obtuso. Filamenta 8.5 mm longa; thecae 8 X 1.4 X 1.1 mm anguste oblongae poro 0.6 mm diam. dorsaliter inclinato; connectivi dens dorsalis 3 mm longus acutus descendens. Stigma non expansum 0.6 mm diam.; stylus 18 X 0.8-0.55 mm glaber; ovarium 6-loculare et 2.2 mm adhaerens, cono 3 mm alto glabro truncato (collo non evoluto).

Type Collection: M. T. Madison & L. Besse 7095 (holotype SEL; isotype US), collected at wet montane forest and stream margins near El Pailon, ca 45 km below Maldonado along path to Tobar Donoso, Prov. Carchi, Ecuador, elev. 800 m, 28 Nov. 1979. "Tree 6 m tall. Leaves shiny on both sides. Calyx green; petals pink, white at base; filaments white, anthers yellow."

Topobea inflata (cf. *Caldasia* 11: 86. 1971) has many inflated branchlet internodes, exterior calyx teeth 1.2-1.5 mm long and projecting ca 1 mm, and a developed lobulate ovary collar ca 1 mm long; in other vegetative and floral details the two species are alike. Other relatives include T. calycularis Naud. (bracts and the relatively wider petals densely fringed, anther connective tooth ca 0.1 mm long) and T. calcarata Uribe (leaf blades lacking dense setula tufts in the primary vein axils beneath, bracts and hypanthia larger, petals relatively wider, anther connective appendage 4.5-4.8 mm long and rather thick). In the Flora of Ecuador, T. modica would key to near T. subscaberula Triana (with broader spacing of leaf secondary veins, deciduous pinoid hairs, shorter petals and anthers, and blunt connective tooth 0.25 mm long).